

REMARKS

Reexamination and reconsideration of the claims 1-10 and 12-27 is respectfully requested. The Examiner's acknowledgement of Applicant's Information Disclosure Statements is appreciated. Additionally, included herewith is a petition for a one-month extension of time under 37 C.F.R. 1.136(a).

Claims 1, 10, and 11 were objected to for informalities. Claims 1 and 10 were amended as suggested in the Office Action and claim 11 has been cancelled.

Claims 1-2, 5-7, 10-11, and 23-27 were rejected under 35 U.S.C. sec. 102(b) applying U.S. Pat. No. 5,422,973 ('973). The '973 patent discloses a fiber optic cable having (1) one or more groups of optical fibers each held together by a circumscribing water absorbent material; (2) a buffering tube having an internal channel larger than the one or more groups of optical fibers in which the groups of optical fibers are moveably disposed; (3) a strength member circumscribing the buffering tube; (4) a water absorbent material circumscribing the strength member, and (5) a jacket circumscribing the strength member. See the Abstract and Fig. 3 of the '973 patent. For a patent to be applicable under sec. 102(b), the patent must, *inter alia*, disclose each and every feature of the claimed invention.

The amendment of claims 1, 10, and 23 is not an admission that the art of record teaches, discloses, or otherwise suggests the features of the claims. Claim 1 recites a fiber optic cable including at least one bundle having a plurality of non-tight buffered optical fibers and a binder element, the binder element maintains the plurality of non-tight buffered optical fibers in the at least one bundle, a separation layer contacting a portion of the at least one bundle, a cable jacket contacting the separation layer, wherein the separation layer inhibits adhesion between the at least one bundle and the cable jacket, and the fiber optic cable excluding a grease or a grease-like composition

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being in contact with the at least one bundle for filling interstices of the cable thereby blocking water from flowing through the cable.

Claim 10 recites a fiber optic cable including at least one bundle having a plurality of non-tight buffered optical fibers and at least one binder thread encircling the plurality of optical fibers, thereby maintaining the plurality of optical fibers in the bundle, a separation layer adjacent to and generally surrounding the at least one bundle, a cable jacket contacting the separation layer, wherein the separation layer inhibits adhesion between the at least one bundle and the cable jacket, and the fiber optic cable excluding a grease or a grease-like composition being in contact with the at least one bundle for filling interstices of the cable thereby blocking water from flowing through the cable.

Claim 23 recites a fiber optic cable including at least one bundle having a plurality of optical fibers and a binder element, the binder element maintaining the plurality of optical fibers in the at least one bundle, an armor layer surrounding the at least one bundle, wherein the armor layer is adjacent to the at least one bundle, and the fiber optic cable excludes a cable jacket within the armor layer.

It is respectfully submitted that at least each and every feature of claims 1, 10, and 23 are not disclosed either explicitly, or inherently, by the '973 patent. The '973 patent requires that the groups of optical fibers 10 held together by yarn or tape 13 are disposed within a buffer tube 15. In other words, at least buffer tube 15 is interposed between the groups of optical fibers and a cable jacket 21. See Figs. 3 and 4 of the '973 patent.

On the other hand, claim 1 recites, *inter alia*, a separation layer that contacts a portion of the at least one bundle and a cable jacket contacting the separation layer for inhibiting

adhesion between said at least one bundle and said cable jacket. Claim 10 recites, *inter alia*, a separation layer adjacent to and generally surrounding the at least one bundle, and a cable jacket contacting the separation layer, wherein said separation layer inhibits adhesion between said at least one bundle and the cable jacket. Claim 23 recites, *inter alia*, an armor layer surrounding the at least one bundle, wherein the armor layer is adjacent to the at least one bundle. For at least these reasons, withdrawal of the sec. 102(b) rejection of claims 1-2, 5-7, 10-11, and 23-27 is warranted and is respectfully requested.

Claims 1, 9-11, 15-18, and 22 were rejected under 35 U.S.C. sec. 102(b) applying U.S. Pat. No. 5,345,526 ('526). The '526 patent discloses a fiber optic cable having a plurality of buffer tubes with optical fibers therein positioned around a central member with three levels of color coding to enhance identification of individual optical fibers within the cable. See the Abstract and Figs. 1-4 of the '526 patent. For a patent to be applicable under sec. 102(b), the patent must, *inter alia*, disclose each and every feature of the claimed invention.

The amendment of claim 16 is not an admission that the art of record teaches, discloses, or otherwise suggests the features of the claim. Claim 16 recites a fiber optic cable including a central member, at least one bundle having a plurality of non-tight buffered optical fibers and a binder element, the binder element maintains the plurality of non-tight buffered optical fibers in the at least one bundle, a cable jacket surrounding the at least one bundle, a separation layer for inhibiting adhesion between the at least one bundle and the cable jacket, wherein said separation layer is adjacent to said at least one bundle, and the fiber optic cable excluding a grease or a grease-like composition being in contact with the at least one bundle for filling interstices of the cable thereby blocking water from flowing through the cable.

It is respectfully submitted that at least each and every feature of claims 1, 10, and 16 are not disclosed either explicitly, or inherently, by the '526 patent. The '526 patent requires that optical fiber bundles 24 are disposed within respective buffer tubes 16 that are stranded about a central member formed from a fiber reinforced plastic rod 12. In other words, at least buffer tube 16 is interposed between optical fiber bundles 24 and a cable jacket 20. Moreover, the '526 patent requires wrapping aramid yarns 18 around the buffer tubes before extruding jacket 20 thereover. See Figs. 1-4 of the '973 patent and Col. 3, ll. 64-67.

For at least the same reasons stated above with respect to claims 1 and 10, the '526 patent does not disclose, teach, or otherwise suggest each and every feature of claims 1 and 10.

Claim 16 recites, *inter alia*, that a cable jacket surrounds the at least one bundle and a separation layer inhibits adhesion between the at least one bundle and the cable jacket, wherein the separation layer is adjacent to said at least one bundle. On the other hand, the '526 patent has aramid yarns 18 wrapped around the stranded buffer tubes 16 that house optical fiber bundles 24. For at least the reasons stated, withdrawal of the sec. 102(b) rejection of claims 1, 9-11, 15-18, and 22 is warranted and is respectfully requested.

Claims 3 and 4 were rejected under 35 U.S.C. sec. 103(a) applying the '526 patent without a teaching reference. For at least the reasons stated above with respect to claim 1, withdrawal of the sec. 103(a) rejection of claims 3 and 4 is warranted and is respectfully requested.

Claim 8 was rejected under 35 U.S.C. sec. 103(a) applying the '973 patent in view of the '526 patent. For at least the reasons stated above with respect to claim 1, withdrawal of the sec. 103(a) rejection of claim 8 is warranted and is respectfully requested.

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Claims 12 and 13 were rejected under 35 U.S.C. sec. 103(a) applying the '973 patent in view of DE Patent No. 195 46 773 A1. For at least the reasons stated above with respect to claim 10, withdrawal of the sec. 103(a) rejection of claims 12 and 13 is warranted and is respectfully requested.

Claims 19 and 20 were rejected under 35 U.S.C. sec. 103(a) applying the '526 patent in view of DE Patent No. 195 46 773 A1. For at least the reasons stated above with respect to claim 16, withdrawal of the sec. 103(a) rejection of claims 19 and 20 is warranted and is respectfully requested.

Claim 14 was rejected under 35 U.S.C. sec. 103(a) applying the '973 patent in view of U.S. Pat. No. 5,561,730 ('730). For at least the reasons stated above with respect to claim 10, withdrawal of the sec. 103(a) rejection of claim 14 is warranted and is respectfully requested.


Claim 21 was rejected under 35 U.S.C. sec. 103(a) applying the '526 patent in view of the '730 patent. For at least the reasons stated above with respect to claim 16, withdrawal of the sec. 103(a) rejection of claim 21 is warranted and is respectfully requested.

No new fees are believed due in connection with this Reply. If any fees are due in connection with this Reply, please charge any fees, or credit any overpayment, to Deposit Account Number 19-2167.

Allowance of all pending claims is believed to be warranted and is respectfully requested.

The Examiner is welcomed to telephone the undersigned to discuss the merits of this patent application.

Respectfully submitted,

  
Michael E. Carroll, Jr.  
Attorney  
Reg. No. 46,602  
P.O. Box 489  
Hickory, N. C. 28603  
Telephone: 828/901-6725

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

1. (amended) A fiber optic cable comprising:  
at least one bundle, said at least one bundle comprising a plurality of non-tight buffered optical fibers and a binder element;

said binder element maintaining the plurality of non-tight buffered optical fibers in said at least one bundle;

a separation layer contacting a portion of [generally surrounding] said at least one bundle;

a cable jacket contacting [surrounding] said separation layer, wherein said separation layer [which] inhibits adhesion between said at least one bundle and said cable jacket [without surrounding each bundle of optical fibers with a respective jacket]; and

said fiber optic cable excluding a grease or a grease-like composition being in contact with said at least one bundle for filling interstices of the cable thereby blocking water from flowing through the cable.

10. (amended) A fiber optic cable comprising:  
at least one bundle, said bundle comprising a plurality of non-tight buffered optical fibers and at least one binder thread encircling the plurality of optical fibers, thereby maintaining [to thereby maintain] the plurality of optical fibers in the bundle;

a separation layer adjacent to and generally surrounding said at least one bundle;

a cable jacket contacting [surrounding] said separation layer, wherein said separation layer [which] inhibits adhesion between said at least one bundle and said cable jacket [without surrounding each bundle of optical fibers with a respective

jacket]; and

said fiber optic cable excluding a grease or a grease-like composition being in contact with said at least one bundle for filling interstices of the cable thereby blocking water from flowing through the cable.

Please cancel claim 11 without prejudice.

16. (amended) A fiber optic cable comprising:

a central member;

at least one bundle, said at least one bundle comprising a plurality of non-tight buffered optical fibers and a binder element;

said binder element maintaining said plurality of non-tight buffered optical fibers in said at least one bundle;

a cable jacket surrounding said at least one bundle;

a separation layer for inhibiting adhesion between said at least one bundle and said cable jacket, wherein said separation layer is adjacent to said at least one bundle; and

said fiber optic cable excluding a grease or a grease-like composition being in contact with said at least one bundle for filling interstices of the cable thereby blocking water from flowing through the cable.

23. (amended) A fiber optic cable comprising:

at least one bundle, said at least one bundle comprising a plurality of optical fibers and a binder element;

said binder element maintaining said plurality of optical fibers in said at least one bundle;

an armor layer surrounding said at least one bundle, wherein said armor layer is adjacent to said at least one bundle; and

said fiber optic cable excluding a cable jacket within said armor layer.

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